LIST OF CONTENTS

NUMBER 1

C.K. Woo, D. Lloyd, R. Karimov and A. Tishler	1	Stranded cost recovery in electricity market reforms in the US
S. Kalligeros, F. Zannikos, S. Stournas and E. Lois	15	Fuel adulteration issues in Greece
Y. Cerci	27	Performance evaluation of a single-flash geothermal power plant in Denizli, Turkey
D. Jain and G.N. Tiwari	37	Thermal aspects of open sun drying of various crops
I.L. Leites, D.A. Sama and N. Lior	55	The theory and practice of energy saving in the chemical industry: some methods for reducing thermodynamic irreversibility in chemical technology processes

NUMBER 2

E. Torres-Reyes, J.J. Navarrete-González, A. Zaleta-Aguilar and J.G. Cervantes-de Gortari	99	Optimal process of solar to thermal energy conversion and design of irreversible flat-plate solar collectors
S. Ashok and R. Banerjee	115	Optimal cool storage capacity for load management
A. Roos, F. Bohlin, B. Hektor and B. Hillring	127	Woodfuel procurement strategies of district heating plants
J.M. Choi and Y.C. Kim	141	Capacity modulation of an inverter-driven multi-air conditioner using electronic expansion valves
O. Büyükalaca, F. Ekinci and T. Yılmaz	157	Experimental investigation of Seyhan River and dam lake as heat source–sink for a heat pump
P. Fernández González and R. Pérez Suárez	171	Decomposing the variation of aggregate electricity intensity in Spanish industry

NUMBER 3

T. Kosugi and P.S. Pak	185	Economic evaluation of solar thermal hybrid H_2O turbine power generation systems
J. Cañada, G. Pedros and J.V. Bosca	199	Relationships between UV (0.290–0.385 μm) and broad band solar radiation hourly values in Valencia and Córdoba, Spain
R.U. Ayres, L.W. Ayres and B. Warr	219	Exergy, power and work in the US economy, 1900–1998

doi:10.1016/S0360-5442(03)00234-2

L.Z. Zhang and J.L. Niu	275	A pre-cooling Munters environmental control desiccant cooling cycle in combination with chilled-ceiling panels

NUMBER 4

M.T. Brown	293	Prof. Howard T. Odum, 1924 - 2002
M. Kushler, E. Vine and D. York	303	Using energy efficiency to help address electric systems reliability: an initial examination of 2001 experience
E. Vine	319	Opportunitites for promoting energy efficiency in buildings as an air quality compliance approach
H.-Y. Kwak, D.-J. Kim and J.-S. Jeon	343	Exergetic and thermoeconomic analyses of power plants
E. Luiten and K. Blok	361	The success of a simple network in developing an innovative energy-efficient technology

NUMBER 5

R.J. Spiegel and J.L. Preston	397	Technical assessment of fuel cell operation on landfill gas at the Groton, CT, landfill
C. Schaefer, C. Weber and A. Voss	411	Energy usage of mobile telephone services in Germany
F. Al-Mansour, S. Merse and M. Tomsic	421	Comparison of energy efficiency strategies in the industrial sector of Slovenia
P. v. Zedtwitz and A. Steinfeld	441	The solar thermal gasification of coal — energy conversion efficiency and CO_2 mitigation potential
E. Sciubba	457	Cost analysis of energy conversion systems via a novel resource-based quantifier
A.N. Celik	479	Long-term energy output estimation for photovoltaic energy systems using synthetic solar irradiation data

NUMBER 6

M. Burer, K. Tanaka, D. Favrat and K. Yamada	497	Multi-criteria optimization of a district cogeneration plant integrating a solid oxide fuel cell–gas turbine combined cycle, heat pumps and chillers
M.J. Kaiser and A.G. Pulsipher	519	A generalized modeling framework for public benefit fund program valuation

A. Midilli and H. Kucuk	539	Energy and exergy analyses of solar drying process of pistachio
A. González, J.M. Sala, I. Flores and L.M. López	557	Application of thermoeconomics to the allocation of environmental loads in the life cycle assessment of cogeneration plants
J.-M. Lee, J.-S. Kim and J.-J. Kim	575	Evaluation of the 200 MWe Tonghae CFB boiler performance with cyclone modification
J. Szargut	591	Letter to the Editor

NUMBER 7

Y. Qu, X. Wei and C. Zhong	597	Experimental study on the direct liquefaction of *Cunninghamia lanceolata* in water
A.F. Massardo, M. Santarelli and R. Borchiellini	607	Carbon exergy tax (*CET*): its impact on conventional energy system design and its contribution to advanced systems utilisation
A. Kumar, S.C. Bhattacharya and H.L. Pham	627	Greenhouse gas mitigation potential of biomass energy technologies in Vietnam using the long range energy alternative planning system model
L. Young and C.C.P. Pian	655	High-temperature, air-blown gasification of dairy-farm wastes for energy production
A.T. de Almeida, P. Fonseca and P. Bertoldi	673	Energy-efficient motor systems in the industrial and in the services sectors in the European Union: characterisation, potentials, barriers and policies
K. Möllersten, J. Yan and M. Westermark	691	Potential and cost-effectiveness of CO_2 reductions through energy measures in Swedish pulp and paper mills
A.S. Malik and C.U. Sumaoy	711	A case study of local integrated resource planning
M. Patel	721	Cumulative energy demand (CED) and cumulative CO_2 emissions for products of the organic chemical industry
S.-M. Lu, Y.-C.M. Li and J.-C. Tang	741	Optimum design of natural-circulation solar-water-heater by the Taguchi method

T.M.I. Mahlia, H.H. Masjuki, R. Saidur, I.A. Choudhury and A.R. NoorLeha	751	Projected electricity savings from implementing minimum energy efficiency standard for household refrigerators in Malaysia

NUMBER 8

S. Meyers, J.E. McMahon, M. McNeil and X. Liu	755	Impacts of US federal energy efficiency standards for residential appliances
V.N. Pokrovski	769	Energy in the theory of production
D.G. Streets	789	Environmental benefits of electricity grid interconnections in Northeast Asia
S.P. Wang, Q.L. Chen, Q.H. Yin and B. Hua	809	Exergy destruction due to mean flow and fluctuating motion in incompressible turbulent flows through a tube
Y. Jianwei, S. Guolong, K. Cunjiang and Y. Tianjun	825	Oxygen blast furnace and combined cycle (OBF-CC)—an efficient iron-making and power generation process
J. Mitchell-Jackson, J.G. Koomey, B. Nordman and M. Blazek	837	Data center power requirements: measurements from Silicon Valley
L. Gustavsson and Å. Karlsson	851	Heating detached houses in urban areas
W.L. Lee, F.W.H. Yik and P. Jones	877	A strategy for prioritising interactive measures for enhancing energy efficiency of air-conditioned buildings
S.-C. Hu and Y.K. Chuah	895	Power consumption of semiconductor fabs in Taiwan

NUMBER 9

	909	Reviewers for ENERGY - The International Journal December 15, 2001-December 30, 2002
A.Z. Dalgleish and L.J. Grobler	913	Measurement and verification of a motor sequencing controller on a conveyor belt
H. Sarak and A. Satman	929	The degree-day method to estimate the residential heating natural gas consumption in Turkey: a case study
D.J. Sailor and A.A. Pavlova	941	Air conditioning market saturation and long-term response of residential cooling energy demand to climate change

H. Akbari	953	Measured energy savings from the application of reflective roofs in two small non-residential buildings

NUMBER 10

G. Liu, P. Yang, Z. Peng, G. Wang and W. Zhang	969	Comparative study of the quality of some coals from the Zibo coal field
J. Islas, F. Manzini and M. Martínez	979	Cost-benefit analysis of energy scenarios for the Mexican power sector
F. Chejne and J.A. Restrepo	993	New rules for the exergo-economic optimization methodology
M.R. Richter, S.M. Song, J.M. Yin, M.H. Kim, C.W. Bullard and P.S. Hrnjak	1005	Experimental results of transcritical CO_2 heat pump for residential application
K.C.A. Alam, Y.T. Kang, B.B. Saha, A. Akisawa and T. Kashiwagi	1021	A novel approach to determine optimum switching frequency of a conventional adsorption chiller

NUMBER 11

	1043	Editorial
J.T. Szargut	1047	Anthropogenic and natural exergy losses (exergy balance of the Earth's surface and atmosphere)
T. Kodama, T. Shimizu, T. Satoh and K.-I. Shimizu	1055	Stepwise production of CO-rich syngas and hydrogen via methane reforming by a WO_3-redox catalyst
F. Yüksel and M.A. Ceviz	1069	Thermal balance of a four stroke SI engine operating on hydrogen as a supplementary fuel
E. Worrell, J.A. Laitner, M. Ruth and H. Finman	1081	Productivity benefits of industrial energy efficiency measures
J. Khedari, N. Rachapradit and J. Hirunlabh	1099	Field study of performance of solar chimney with air-conditioned building
M. Rodrigues, A. Walter and A. Faaij	1115	Co-firing of natural gas and Biomass gas in biomass integrated gasification/combined cycle systems

NUMBER 12

H. Bulut, O. Büyükalaca and T. Yılmaz	1133	New outdoor heating design data for Turkey
W.M. Worek, D. Ludovisi and M. Meckler	1151	Enhancement of a double-effect absorption cooling system using a vapor recompression absorber
V. Badescu	1165	Dynamic model of a complex system including PV cells, electric battery, electrical motor and water pump
J.C. Ordonez and A. Bejan	1183	Minimum power requirement for environmental control of aircraft
H. Chang and S.-C. Chuang	1203	Process analysis using the concept of intrinsic and extrinsic exergy losses
M. Rodrigues, A.P.C. Faaij and A. Walter	1229	Techno-economic analysis of co-fired biomass integrated gasification/combined cycle systems with inclusion of economies of scale
U. Atikol and H. Güven	1259	Impact of cogeneration on integrated resource planning of Turkey

NUMBER 13

W. Fratzscher, K. Stephan and N. Lior	1279	Preface
W. Fratzscher and K. Stephan	1281	Waste energy usage and entropy economy
G. Hirs	1303	Thermodynamics applied. Where? Why?
E. Sciubba	1315	Extended exergy accounting applied to energy recovery from waste: The concept of total recycling
P. Suter	1335	A new guiding paradigm for waste disposal
O. Renn	1345	Social assessment of waste energy utilization scenarios
M. Bergmeier	1359	The history of waste energy recovery in Germany since 1920

NUMBER 14

J.K. Kaldellis	1375	Feasibility evaluation of Greek State 1990–2001 wind energy program
R.D. Perlack and A.F. Turhollow	1395	Feedstock cost analysis of corn stover residues for further processing
L. Gustavsson and R. Madlener	1405	CO_2 mitigation costs of large-scale bioenergy technologies in competitive electricity markets
M. Kane, D. Larrain, D. Favrat and Y. Allani	1427	Small hybrid solar power system
L. Yang, J. Liang and L. Yu	1445	Clean coal technology—Study on the pilot project experiment of underground coal gasification
S. Thomas and R.A. Dawe	1461	Review of ways to transport natural gas energy from countries which do not need the gas for domestic use
H. Ogura, T. Yamamoto and H. Kage	1479	Efficiencies of $CaO/H_2O/Ca(OH)_2$ chemical heat pump for heat storing and heating/cooling
I.L. Greeff, J.A. Visser, K.J. Ptasinski and F.J.J.G. Janssen	1495	Integration of a turbine expander with an exothermic reactor loop—Flow sheet development and application to ammonia production
Y.J. Dai and K. Sumathy	1511	Heat and mass transfer in the adsorbent of a solar adsorption cooling system with glass tube insulation
	1529	Book review
	1531	Corrigendum

NUMBER 15

M.M. Kablan	1533	Energy conservation projects implementation at Jordan's industrial sector: a total quality management approach
E. Dotzauer	1545	Experiences in mid-term planning of district heating systems
S. Mahmud and R.A. Fraser	1557	Mixed convection–radiation interaction in a vertical porous channel: Entropy generation
H.D. Ammari and A. Al-Maaitah	1579	Assessment of wind-generation potentiality in Jordan using the site effectiveness approach

S. Garimella	1593	Innovations in energy efficient and environmentally friendly space-conditioning systems
M.J. Kaiser and A.G. Pulsipher	1615	The impact of the hold-harmless and give-back provisions on the Low-Income Home Energy Assistance Program allocation mechanism
M. Gong	1655	Optimization of industrial energy systems by incorporating feedback loops into the MIND method
G.K.F. Tso and K.K.W. Yau	1671	A study of domestic energy usage patterns in Hong Kong
Z.F. Li and K. Sumathy	1683	A computational study on the performance of a solar air-conditioning system with a partitioned storage tank
	1687	Book review